



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/639,574	08/14/2000	Ryan Middleton	TI-28458	1734

7590 07/14/2004
Robert L Troike
Texas Instruments Incorporated
P O Box 655474 MS 3999
Dallas, TX 75265

EXAMINER

NATNAEL, PAULOS M

ART UNIT PAPER NUMBER

2614

13

DATE MAILED: 07/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/639,574

Applicant(s)

MIDDLETON ET AL.

Examiner

Paulos M. Natnael

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims **1-12** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention:

The specification discloses, "When the main channels are sent under data compression such as MPEG1 and MPEG2, they do not require isolation...The main source 111 is modulated using a data compressed modulation...The ancillary source 19 data and command/controls signals are sent between the data compressed MPEG channels." (see pages 3 and 4) Thus, the newly added limitation and the claimed phrase "uncompressed broadcast" (all occurrences) is considered new matter. If applicant contends that it is not new matter, specific location in specification, i.e., page and line number etc. should be pointed out.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims **1,4,6-11** are **again** rejected under 35 U.S.C. 102(e) as being anticipated by Rosengren et al., U.S. Pat. No. 6,041,068.

a) a television broadcast transmitter including means for generating and transmitting main television signals and separate ancillary television signals with a separate television show segment related to said main signals, is met by Television transmitter, Fig.5, which comprises the Demultiplexer 50 which "selects an elementary video stream Vm from which an ancillary signal Va is to be derived." (col. 4, lines 49-50)
; see also col. 3, lines 59-61)

b) a television receiver system for receiving said main signals and for receiving and storing in a cache memory the ancillary television signals including the separate television show segment, is met by the Picture in Picture receiver, fig. 6; (see also Figs.1 and 3 as well as col. 3, lines 59-61)

c) selective means at the television receiver for providing either the main signals or the ancillary television signals with the separate television show segment to a display of said television receiver, is met by the Video switch 77, Fig.7, which selects one of the video signals Vi and Vj. (see col. 5, lines 44-50)

Considering claim 4, the system of claim 1 wherein said television signals are transmitted over a digital television channel subdivided into several subchannels of multiplexed signals and wherein one of said subchannels contains said main television signals and the other sub-channels provide the ancillary signals;

Regarding claim 4, see rejection of claim 1.

Considering claim 6, wherein said separate ancillary signal contains short television signal segments related to the main signals, and said cache stores said segments and said main signals and contains control data providing means for removing and storing said segments and said receiver system includes means responsive to said control data for storing and removing said short segments from said cache;

Regarding claim 6, see rejection of claim 1;

Considering claim 7, the system of Claim 1 wherein said ancillary signals include ancillary data and command and control signals is met by the program specific

information transmitted from the transmitter and decoded by the decoder to specify the presence of the ancillary elementary video stream...etc. (see col. 4, lines 32-43)

Considering claim 8, wherein said main signals are data compressed signals and the ancillary signals are in the sideband channels between said main signals, is met by the disclosure that a device for deriving an ancillary signal from a compressed digital video signal (e.g. MPEG) wherein the ancillary signal includes selected part of the main signal...(see abstract).

Considering claim 9, the system of Claim 1 wherein said main signals are data compressed segments and the ancillary signals are in the sidebands between said main signals.

Regarding claim 9, see rejection of claim 8.

Considering claim 10, wherein said main signals and ancillary signals are different parts of a high definition television channel;

Regarding claim 10, see rejection of claim 8 and see the Abstract.

Considering claim 11, means for switching between high definition television channel and one standard television sub-channel and an ancillary sub-channel.

Regarding claim 11, see rejection of claims 1(c).

3. Claims **2 and 12** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Rosengren**, U.S. Pat. No. 6,041,068 in view of **Yuen et al.** U.S. Pat. No. 6,452,640.

Considering claims **2 and 12**, the claimed means for generating an icon on a television receiver display indicating the presence of the stored ancillary signals and means at the television receiver for accessing said stored ancillary signal in said cache memory using said icon.

Regarding claim 2, Rosengren does not specifically disclose an icon that would be displayed on screen of the TV to indicate the presence of an ancillary signal. However, such a method or feature is well known in the art. Yuen et al disclose for a sound bite augmentation device where an audio description of a television program, i.e., a sound bite, is reproduced simultaneously with the display of the program at the television receiver. Yuen specifically teaches an icon display on the screen to indicate the presence of a sound bite as shown in Figs. 4 and 5. Therefore, it would have been obvious to the skilled in the art at the time the invention was made to modify the system of Rosengren by providing an icon to indicate the presence of stored ancillary signals in memory so that the viewer would have the choice to view or check the ancillary signals in order to decide whether to order or purchase a program or movie by previewing the ancillary signal, for instance, instead of ordering the full program or service.

4. Claim **3 is again** rejected under 35 U.S.C. 103(a) as being unpatentable over **Rosengren**, U.S. Pat. No. 6,041,068 in view of **Dougherty et al.**, U.S. Pat. No. 5,737,025.

Considering claim **3**, wherein said ancillary signal is broadcasted in the vertical blanking interval of the main signal and said receiver receives the ancillary signal during the vertical blanking interval

Regarding claim **3**, Rosengren does not disclose broadcasting in the vertical blanking interval. However, broadcasting in the vertical blanking interval (VBI) is notoriously well known in the art. **Dougherty et al** discloses co-channel transmission of program signals and ancillary signals using the VBI of the video signal. Therefore, it would have been obvious to the skilled in the art at the time the invention was made to modify the system of Rosengren by providing the notoriously well known VBI transmission method of Dougherty et al in order to transmit ancillary signal on the VBI so that the system of Rosengren is made more flexible, thus, useful to the user.

5. Claim **5 is again** rejected under 35 U.S.C. 103(a) as being unpatentable over **Rosengren**, U.S. Pat. No. 6,041,068.

Considering claim **5**, wherein said main sub-channel carries the control data for commands for updating by removing old sub-channel segments and storing new ones.

Regarding claim **5**, Rosengren does not disclose whether the control data for commands for updating by removing old sub-channel segments and storing new ones.

However, the Examiner takes Official Notice in that, as the specification for the ATVEF standard stipulates, it is well known in the art to send command/control signals using lines in the Vertical Blanking Interval (VBI) to manage the cache, and it is also well known in the art to update systems (storage or otherwise) by removing/deleting old video/audio segments and replacing it with new segments or parts. Therefore, it would have been obvious to the skilled in the art at the time the invention was made to modify the system of Rosengren using the teaching of the ATVEF specification and the prior art in order to give the user an advantage of efficient use and flexibility in storage systems.

Response to Arguments

6. Applicant's arguments filed April 26, 2004 have been fully considered but they are not persuasive. Response follows:

Applicant's arguments

There is not teaching of taking advantage of the capacity of the high definition television equipment to broadcast simultaneously two **uncompressed broadcast** television signals to give the user the ability to receive and utilize both simultaneously.

Examiner's Response

Because applicant is arguing using the newly added limitation or phrase

"uncompressed broadcast", which has been rejected as new matter (see the new

matter rejection under 35 USC § 112 1st paragraph above), the amended claims have not been treated to their merits.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paulos M. Natnael whose telephone number is (703) 305-0019. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (703) 305-4795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2614

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PMN

July 1, 2004



MICHAEL H. LEE
PRIMARY EXAMINER